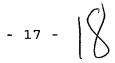
## What is claimed is:

A surface acoustic wave device comprising:
a LiTaO substrate; and

an interdigital transducer provided on the LiTaO<sub>3</sub> substrate, said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W; wherein

said interdigital transducer has a normalized film thickness  $H/\lambda$  of at least approximately 0.05 so as to excite a shear horizontal wave.

- 2. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Au as a major component, said substrate has Euler angles of approximately (0°, 125° 146°, 0°± 5°), and said normalized film thickness  $H/\lambda$  is within the range of approximately 0.001 to 0.05.
- 3. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Ag as a major component, said substrate has Euler angles of approximately (0°, 125° 140°, 0° $\pm$ 5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.002 to 0.05.
- 4. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Ta as a major component, said substrate has Euler angles of approximately (0°, 125° 140°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.002 to 0.05.



- 5. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Mo as a major component, said substrate has Euler angles of approximately (0°, 125° 134°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.005 to 0.05.
- 6. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Cu as a major component, said substrate has Euler angles of approximately (0°, 125° 137°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.003 to 0.05.
- 7. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Ni as a major component, said substrate has Euler angles of approximately (0°, 125° 133°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.006 to 0.05.
- 8. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Cr as a major component, said substrate has Euler angles of approximately (0°, 125° 147°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.003 to 0.05.
- 9. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes Zn as a major component, said substrate has Euler angles of approximately (0°, 125° 138°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.003 to 0.05.

- 10. A surface acoustic wave device according to claim 1, wherein said interdigital transducer includes W as a major component, said substrate has Euler angles of approximately (0°, 125° 138°, 0° $\pm$  5°), and said normalized film thickness H/ $\lambda$  is within the range of approximately 0.002 to 0.05.
- 11. A communication device including the surface acoustic wave device according to claim 1.
- 12. A communication device including the surface acoustic wave device according to claim 2.
- 13. A communication device including the surface acoustic wave device according to claim 3.
- 14. A communication device including the surface acoustic wave device according to claim 4.
- 15. A communication device including the surface acoustic wave device according to claim 5.
- 16. A communication device including the surface acoustic wave device according to claim 6.
- 17. A communication device including the surface acoustic wave device according to claim 7.
- 18. A communication device including the surface acoustic wave device according to claim 8.

- 19. A communication device including the surface acoustic wave device according to claim 9.
- 20. A communication device including the surface acoustic wave device according to claim 10.